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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/330,162	12/27/2002	Lewis S. Cohen	V00058.70025	4376

7590 05/20/2004

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# COPY

EXAMINER

KRUER, KEVIN R

ART UNIT PAPER NUMBER

1773

DATE MAILED: 05/20/2004



Please find below and/or attached an Office communication concerning this application or proceeding.

Confirmation	<input type="checkbox"/>	Initials
Docketing	<input checked="" type="checkbox"/>	<i>hmg</i>
08/20/04 ✓		

DOCKETED  
MAY 25 2004

**Office Action Summary**



Application No.

10/330,162

Applicant(s)

COHEN ET AL.

Examiner

Kevin R Kruer

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 17-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 23-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

**Election/Restriction**

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-16 and 23-28, drawn to a covering laminate, classified in class 428, subclass 458.
  - II. Claims 17-22, drawn to a method of using a covering laminate, classified in class 156, subclass 71.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product could be used by in a materially different process. For example, the product could be applied in such a way that the covering material does not overlap sheets of covering material directly adjacent thereto.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Lawrence Green on April 1, 2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-16 and 23-28.

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5. Affirmation of this election must be made by applicant in replying to this Office action. Claims 17-22 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### ***Drawings***

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: figure #31 (page 13, line 11). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-8, 10- 14, 16, 17, 23, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daroux et al (US 6,207,271).

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Daroux teaches a flexible laminate for packaging comprising a first metallic foil layer, a second metallic foil layer, an intermediate separation layer disposed between the first and second metallic foil layers, and a first self-sealing polymer on the first metallic foil layer (abstract). The laminate may comprise additional metallic foils and separation layers (col 3, lines 29+).

The first and second metallic foil layers preferably comprise aluminum foil (col 4, line 2) with a thickness of less than 100um, more preferably having a thickness of between 5-50um (col 4, line 8). The separation layer (herein relied upon to read on the claimed "puncture resistant material") provides the function of creating space between the metallic foil layers and providing the laminate with tensile strength, penetration resistance, and stiffness (col 3, lines 50+). The separation layer preferably comprises a polymeric sheet, most preferably a Mylar sheet (col 4, line 46), with a thickness of 2-100um, most preferably 3-18um (col 4, lines 34+). The examiner notes that Mylar is a polyester material. The separation layer may be attached to the metallic foil layers with additional layers of thin adhesive (col 4, line 25). The self-sealing polymer may comprise a pressure sensitive adhesive (col 4, line 51).

Daroux discloses that the laminate may comprise additional metallic foils and separation layers, but does not explicitly disclose embodiments with more than 2 metallic foil layers. However, Daroux teaches that multiple metallic foil layers reduce the likelihood of cracks and defects from aligning with each other (col 5, lines 48+). Thus, the laminate's hermeticity is improved. Furthermore, additional layers improve the laminate's strength (col 5, lines 62+). Thus, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to add additional metallic foil layers and separation layers to the laminate taught in Daroux. The motivation for doing so would have been to improve the laminate's hermeticity and strength.

With regard to claims 4 and 13, Daroux teaches that the thickness of the metallic foil layer is most preferably between 5 to 12um (col 4, line 8). The examiner takes the position that "between 5-12um" teaches with sufficiently specificity the claimed range of "about 9 microns."

With regard to claims 6, 7, 14, 16, Daroux teaches that the separation layer preferably has a thickness of 2-100um. The examiner takes the position that "2-100um" teaches with sufficient specificity the claimed thickness of claims 6, 7, 14, and 16.

With regards to the overall laminate thickness claimed in claim 12, Daroux teaches that the overall thickness of the laminate should be kept as thin as possible so that the material maintains sufficient flexibility to be wrapped. At the same time, the laminate must have sufficient thicknesses to impart to the laminate the mechanical properties necessary to provide the toughness and hermeticity required (col 5, lines 5+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to vary the thickness of the laminate taught by Daroux. The motivation for doing so would have been to optimize the laminate's flexibility, toughness and hermeticity.

With regard to the limitation in claim 16 that the pressure sensitive adhesive layer remains tacky in a temperature range of from about -17°F to about 284°F, Applicant's attention is directed to the definition of a "pressure sensitive adhesive" from

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<http://www.dpia.org/glossary/p.html>. Specifically, the website states that a pressure sensitive adhesive is permanently tacky. Thus, the examiner takes the position that the pressure sensitive adhesive taught by Daroux inherently meets the limitations of claim 16 because a pressure sensitive adhesive is permanently tacky regardless of temperature. Furthermore, the examiner notes that the adhesives disclosed by Daroux are acrylic-based. Applicant discloses that the preferred pressure sensitive adhesive is acrylic-based (page 9, lines 16+). Thus, the examiner takes the position that the adhesive taught in Daroux inherently meets the limitations of claim 16 because Daroux utilizes the same adhesives as taught by applicant.

With regard to the claimed "protective layer" of claim 23 and the claimed "layer of material disposed on a side of the covering that is opposite of the one side and that is exposed" of claim 28, Applicant's attention is directed to Figure 3c of Daroux. The examiner takes the position that the outer polymer (structural) layer will inherently be resistant to acid, UV radiation, and salt to some extent. Furthermore, the examiner takes the position that the polymer (structural) is "sufficiently flexible so that it may be conformed to the shape of an insulated pipe" because Daroux teaches that the laminate is desirably "flexible" (col 6, line 6). If a laminate is flexible, the layers comprising the laminate must be flexible.

With regard to the claimed "scrim" layer of claim 26, Daroux teaches that the separation layers may comprise of a woven cloth with a layer of adhesive on both sides thereof (col 4, line 15+). The examiner takes the position that such an embodiment

reads on the laminate of claim 26 wherein the "woven cloth" reads on the claimed scrim and the adhesive layers read on the polymer films.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daroux et al (US 6,207,271) as applied to claims 1-8, 10- 14, 16, 17, 23, and 25-28 above, and further in view of Morgan (US 4,867,818).

Daroux is relied upon as above, but does not teach that a release liner should be applied to the pressure sensitive adhesive. However, Morgan teaches that pressure sensitive adhesives typically have release liners applied thereto (col 1, lines 34+). Said liners protect the adhesive and prevent the pressure sensitive adhesive from prematurely adhering to a surface. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a release liner to the pressure sensitive layer taught in Daroux. The motivation for doing so would have been because release liners are typically applied to pressure sensitive adhesive to protect them and prevent premature adhesion.

1. Claims 15 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daroux et al (US 6,207,271) as applied to claims 1-8, 10- 14, 16, 17, 23, and 25-28 above, and further in view of Igarashi et al (US 4,503,189).

Daroux is relied upon as above, but does not teach that the metal foil layer may comprise a metallized foil. However, Igarashi teaches that metallized films exhibit reduced pin hole formation as compared with aluminum foil, reduce weight, and increased flexural strength (col 1, lines 20+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize metallized foil in



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place of the aluminum foils taught in Daroux. The motivation for doing so would have been to improve the laminate's pin hole formation resistance and flexural strength while reducing its weight.

With regard to claim 24, the examiner takes the position that it would have been obvious to replace one or all of the metal layers taught in Daroux with a metallized foil for the reasons stated above.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 3,967,168; US 6,316,110; US 4,888,247; and US 3,058,704 each teaches laminates comprising alternating layer of metal and polymer films.

US 4,699,830 teaches that a protective layer may be applied to an exposed metal surface of a laminate sheet for used in packaging electronic components.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on 571-272-1516. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

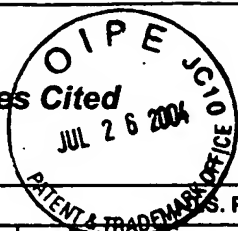
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin R. Kruer  
Patent Examiner-Art Unit 1773

# **Notice of References Cited**



Application/Control No.

10/330,162

Applicant(s)/Patent Under  
Reexamination  
COHEN ET AL.

Examiner

Kevin R Kruer

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## **U.S. PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
A	US-6,316,110	11-2001	Anzaki et al.	428/432
B	US-6,207,271	03-2001	Daroux et al.	428/344
C	US-4,888,247	12-1989	Zweben et al.	428/105
D	US-4,867,818	09-1989	Morgan, Burton D.	156/80
E	US-4,699,830	10-1987	White, Creighton A.	428/35.3
F	US-4,503,189	03-1985	Igarashi et al.	525/104
G	US-3,967,168	06-1976	Christensen, Kenneth	361/323
H	US-3,058,704	10-1962	BERGSTEDT MILTON A	244/119
I	US-			
J	US-			
K	US-			
L	US-			
M	US-			

## **FOREIGN PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
N					
O					
P					
Q					
R					
S					
T					

## **NON-PATENT DOCUMENTS**

*	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
U	<a href="http://www.dpia.org/glossary/p.html">http://www.dpia.org/glossary/p.html</a> ; 2001
V	
W	
X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.